

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A workflow model comprising:
 - a first workflow associated with only a first party;
 - a first workflow view representing an abstracted first workflow, the first workflow view expressing virtual tasks of the first workflow as first vertices within a first matrix;
 - a second workflow associated with only a second party;
 - a second workflow view representing an abstracted second workflow, the second workflow view expressing virtual tasks of the second workflow as second vertices within a second matrix; and
 - a coalition workflow view referencing the first workflow view and the second workflow view to provide a collaborative workflow, the collaborative workflow specifying tasks that the first party and the second party are required to perform.
2. (Original) The workflow model of claim 1 wherein the first workflow and the second workflow are private to the first and second parties, respectively.
3. (Original) The workflow model of claim 1 wherein the first workflow view comprises a first virtual task and a second virtual task corresponding to a first actual task and a second actual task, respectively, of the first workflow.
4. (Previously Presented) The workflow model of claim 3 wherein the first virtual task corresponds to a first plurality of actual tasks of the first workflow, and the second virtual task corresponds to a second plurality of actual tasks of the second workflow.
5. (Original) The workflow model of claim 4 further comprising a first set of dependencies between the first virtual task and the first plurality of actual tasks, and a second set of dependencies between the second virtual task and the second plurality of actual tasks, wherein

the first and second set of dependencies are selected so as to maintain an order of operation of the first plurality of actual tasks relative to the second plurality of actual tasks.

6. (Original) The workflow model of claim 4 wherein a first virtual execution state of the first virtual task corresponds to a first actual execution state of the first plurality of actual tasks.
7. (Original) The workflow model of claim 6 wherein an actual state transition of the first actual execution state is reflected in a virtual state transition of the first virtual execution state.
8. (Original) The workflow model of claim 6 wherein a message from the second party concerning the first virtual task is forwarded to an active task within the first plurality of actual tasks via the first virtual task, based on the first actual execution state.
9. (Original) The workflow model of claim 3 wherein the second workflow view comprises a third virtual task and a fourth virtual task corresponding to a third actual task and a fourth actual task, respectively, of the second workflow.
10. (Original) The workflow model of claim 9 wherein the tasks within the coalition workflow comprise the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task.
11. (Original) The workflow model of claim 10 wherein the tasks within the collaborative workflow further comprise a synchronizing task operable to preserve an order of execution of the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task.
12. (Original) The workflow model of claim 11 wherein the synchronizing task relates a finished execution state of the second virtual task to a beginning execution state of the third virtual task.

13. (Original) The workflow model of claim 1 wherein the collaborative workflow is implemented by communications between the first party and the second party regarding the first workflow view and the second workflow view.

14. (Original) The workflow model of claim 1 wherein the collaborative workflow is implemented by a third-party mediator facilitating communications between the first party and the second party.

15. (Original) The workflow model of claim 1 comprising a third workflow view corresponding to a second abstraction of the first workflow and constructed for forming a second coalition workflow view referencing the third workflow view and a third workflow associated with a third party, to thereby provide a second collaborative workflow associated with the first party and the third party.

16. (Currently Amended) A method comprising:
 associating a first workflow associated with only a first party with a first workflow view representing an abstracted first workflow;
 expressing virtual tasks of the first workflow as first vertices within a first matrix of the first workflow view;
 associating a second workflow associated with only a second party with a second workflow view representing an abstracted second workflow;
 expressing virtual tasks of the second workflow as second vertices within a second matrix of the second workflow view; and
 including the first workflow view and the second workflow view within a coalition workflow view to provide a collaborative workflow, the collaborative workflow specifying tasks that the first party and the second party are required to perform.

17. (Original) The method of claim 16 wherein the first workflow and the second workflow are private to the first and second parties, respectively.

18. (Original) The method of claim 16 wherein associating the first workflow with the first workflow view comprises associating a first virtual task and a second virtual task of the first workflow view with a first actual task and a second actual task, respectively, of the first workflow.

19. (Original) The method of claim 18 wherein associating the first workflow with the first workflow view comprises:

associating the first virtual task with a first plurality of actual tasks of the first workflow;
and

associating the second virtual task with a second plurality of tasks of the second workflow.

20. (Original) The method of claim 19 wherein associating the first workflow with the first workflow view comprises:

constructing a first set of dependencies between the first virtual task and the first plurality of actual tasks; and

constructing a second set of dependencies between the second virtual task and the second plurality of actual tasks,

wherein the first and second set of dependencies are selected so as to maintain an order of operation of the first plurality of actual tasks relative to the second plurality of actual tasks.

21. (Original) The method of claim 19 wherein associating the first virtual task to the first plurality of actual tasks comprises associating a first virtual execution state of the first virtual task with a first actual execution state of the first plurality of actual tasks.

22. (Original) The method of claim 21 further comprising reflecting an actual state transition of the first actual execution state in a virtual state transition of the first virtual execution state.

23. (Original) The method of claim 21 further comprising forwarding a message from the second party concerning the first virtual task to an active task within the first plurality of actual tasks via the first virtual task, based on the first actual execution state.

24. (Original) The method of claim 18 wherein associating the second workflow with the second workflow view comprises associating a third virtual task and a fourth virtual task of the second workflow view with a third actual task and a fourth actual task, respectively, of the second workflow.

25. (Original) The method of claim 24, wherein including the first workflow view and the second workflow view within a coalition workflow view comprises including the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task within the coalition workflow as the tasks within the coalition workflow.

26. (Original) The method of claim 25 wherein including the first workflow view and the second workflow view within a coalition workflow view comprises including a synchronizing task operable to preserve an order of execution of the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task within the coalition workflow as the tasks within the coalition workflow.

27. (Original) The method of claim 26 wherein including a synchronizing task comprises relating a finished execution state of the second virtual task to a beginning execution state of the third virtual task.

28. (Original) The method of claim 16 wherein including the first workflow view and the second workflow view within a coalition workflow view comprises communicating between the first party and the second party regarding the first workflow view and the second workflow view, to thereby implement the collaborative workflow.

29. (Original) The method of claim 16 wherein the collaborative workflow is implemented by a third-party mediator facilitating communications between the first party and the second party.

30. (Original) The method of claim 16 further comprising:
associating a third workflow view with a second abstraction of the first workflow; and
forming a second coalition workflow view referencing the third workflow view and a third workflow associated with a third party, to thereby provide a second collaborative workflow associated with the first party and the third party.

31. (Currently Amended) A system comprising:
a first workflow modeler operable to model a first workflow associated with only a first party;
a first view modeler operable to model a first virtual workflow as an abstracted first workflow, the first view modeler expressing virtual tasks of the first workflow as first vertices within a first matrix of a first workflow view; and
a workflow engine operable to execute the first workflow and to virtually execute the first virtual workflow in conjunction with a second workflow associated with only a second party.

32. (Original) The system of claim 31 wherein the workflow engine is operable to execute the first virtual workflow in conjunction with a second virtual workflow, wherein the second virtual workflow is an abstraction of the second workflow.

33. (Original) The system of claim 31 wherein the first virtual workflow comprises a first virtual task associated with a first task and a second task of the first workflow, and further wherein the workflow engine is operable to associate a virtual execution state of the first virtual task with a first execution state of the first task and a second execution state of the second task.

34. (Original) The system of claim 33 further comprising a monitor operable to track the virtual execution state, the first execution state, and the second execution state.

35. (Original) The system of claim 31 further comprising a database for storing the first workflow, instances of the first workflow, the first virtual workflow, and instances of the first virtual workflow.

36. (Original) The system of claim 31 further comprising a gateway operable to route messages to and from the second party and the workflow engine, the messages concerning the first virtual workflow and the second workflow.

37. (Original) The system of claim 31 further comprising a mediator operable to mediate interactions between the first virtual workflow and the second workflow, the mediator comprising:

- a security manager operable to receive messages regarding the first virtual workflow for decryption;

- a database operable to store the first virtual workflow, the second workflow, instances of the first virtual workflow, and instances of the second workflow; and

- a monitor operable to track execution states of the first virtual workflow and the second workflow.